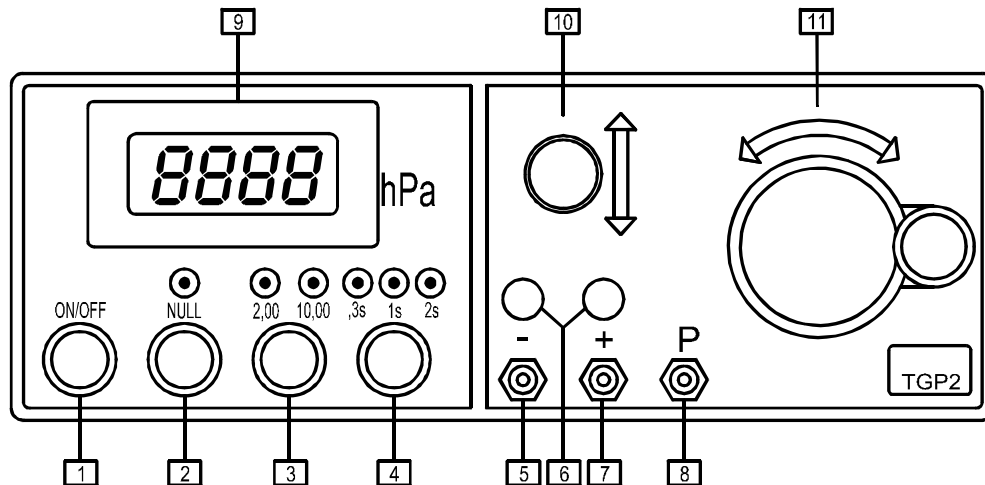


# Operating Instructions: Pressure Calibrator Type TGP 2



## Description:

The TGP2 is a pressure calibrator incorporating an integrated pressure generator and pressure reference both for battery and mains operation. Pressure build-up is done using a hand pump and for fine adjustment a metal bellows is used.



## Operating Elements:

### [1] ON/OFF KEYPAD

Power is supplied by connecting the jack connector of the supplied plug-in power supply at the back of the housing. Using the ON / OFF keypad the TGP 2 can be switched on or off. If the jack connector is removed the device automatically switches over to battery operation.

### [2] ZERO POINT KEYPAD

This keypad is used to adjust the sensor to zero. Zero setting must be carried out with the pressure inputs open. During zero setting the red LED over the keypad is illuminated. Response times are automatically set to the shortest times and must be reset to the required values if necessary.

### [3] MEASUREMENT RANGE KEYPAD

Using this keypad the measurement range is selected. The LED over the keypad displays the corresponding measurement range value.

### [4] RESPONSE TIMES

To suppress pressure peaks the response times of the instrument can be set using this keypad. The corresponding integration times are displayed by the LEDs.

### [5] PRESSURE INPUT

Measurement input for negative overpressure.

### [6] VENTILATING VALVES

This keypad is used to ventilate the measurement set-up.

### [7] PRESSURE INPUT

Measurement input for positive overpressure.

### [8] PRESSURE OUTPUT (P)

At this output the pressure produced by the pumps or bellows can be tapped and using a T-connector can be connected to the test piece " + " or " - " inputs and pressure " + " or " - " inputs of the TGP2.

### [9] LC-DISPLAY

The measured pressure is displayed on this LED. A negative overpressure is indicated with a 'minus' prefix. Should the battery voltage be exceeded the battery symbol display is illuminated.

### [10] PUMPS

For large displacement volumes a coarse setting of the measured pressure is selected by the pumps. Fine adjustment is carried out as in [11].

**Caution:** Excessive pressures can damage the measurement cells.

### [11] BELLOWS

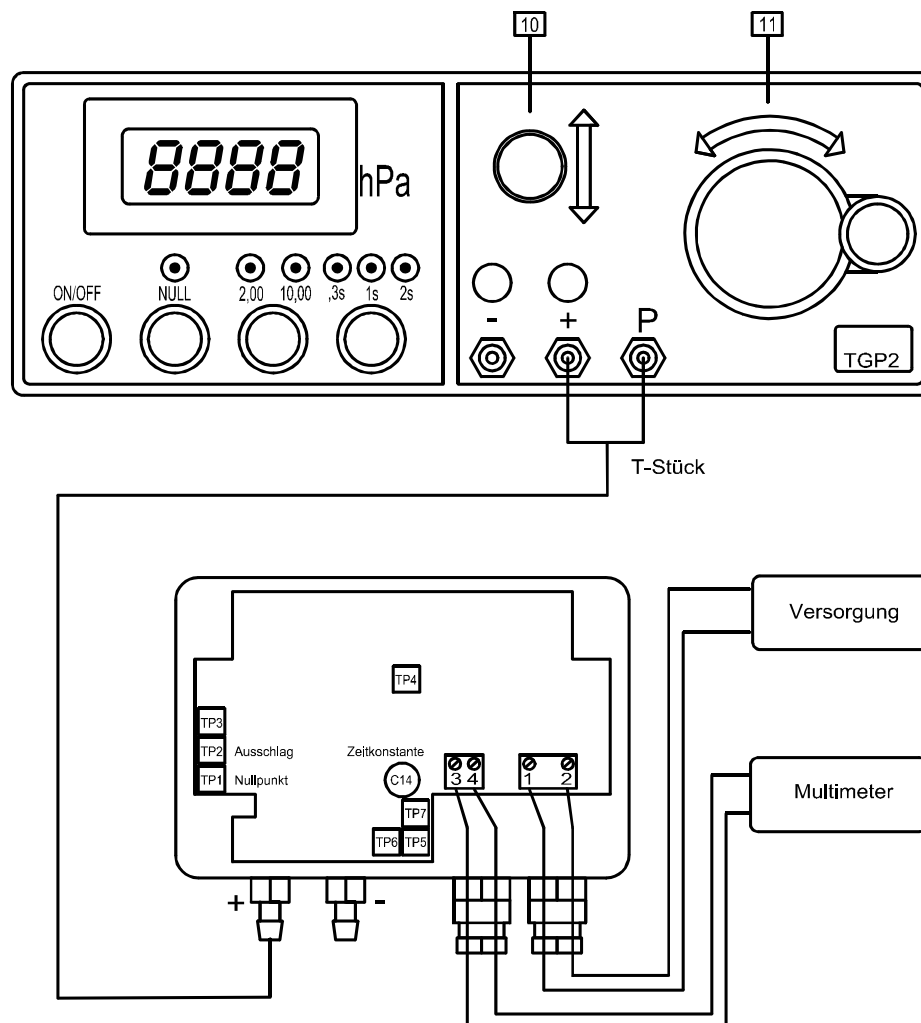
For small volume displacements as well as for fine pressure adjustments the metal bellows should be preferably be used. The metal bellows has two mechanical stops. Turning to the right results in a pressure increase whereas turning to the left causes a decrease.

**Never blow into the pressure connections! Measurement ranges up to 100 hPa can thereby be damaged or destroyed.**

# Directions for the Calibration of Pressure-Measuring Transducer using the Type TGP2 Calibrator



## Description



## Description

The pressure output P of the pressure calibrator should be connected (via tubing 6mm diam.) at a low or negative pressure using a T-piece to the pressure to be measured as well as to the pressure input: "+" input for overpressure or "-" for under pressure. For large displacement volumes the measuring pressure is set to coarse using the pump (10). The pump is operated by pulling and pressing the pump knob. Fine setting of the pressure is carried out using the metal bellows (11). On turning the knob (11) to the right an internal bellows is compressed (via a spindle) resulting in a pressure increase. Turning this knob (11) to the left causes an extension of the bellows resulting in a pressure decrease. Rotation of the metal bellows (approx. 20 revolutions) is limited by two mechanical limit stops. The set pressure is displayed on the LCD by means of an integrated pressure reference.

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